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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,517	02/22/2002	Minh Van Ngo	50432-234	6429
75	90 05/06/2003			
McDERMOTT, WILL & EMERY			EXAMINER	
600 13th Street, Washington, DO			WYSZOMIERSKI, GEORGE P	
•			ART UNIT	PAPER NUMBER
			1742	U
·			DATE MAILED: 05/06/2003	- /

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>	A U Ai N	Applicant(s)					
	Application N .	Applicant(s)					
667 4 47 5 6 5 5 5 5	10/079,517	NGO, MINH VAN					
Offic Action Summary	Examiner	Art Unit					
	George P Wyszomierski	1742					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status							
1) Responsive to communication(s) filed on	·						
2a) ☐ This action is FINAL . 2b) ☑ T	his action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-14</u> is/are pending in the applicatio							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1,8,9,13 and 14</u> is/are rejected.							
7)⊠ Claim(s) <u>2-7 and 10-12</u> is/are objected to.	7)⊠ Claim(s) <u>2-7 and 10-12</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9)☐ The specification is objected to by the Examin	er.						
10)⊠ The drawing(s) filed on <u>03 June 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documer	ts have been received.						
2. Certified copies of the priority documer	ts have been received in Appli	cation No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)					
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office A	Action Summary	Part of Paper No. 4					



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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lee et al. (U.S. Patent 6,429,049), particularly column 4, lines 1-4 therein.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 8, 9, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

The Lee patent discloses in general a process of making vias for semiconductor packaging including a step of exposing a copper oxide surface to a laser beam to remove oxide until a copper surface is exposed. Lee doesnot specify the temperature and time as recited in instant claims 8 and 9; however, given that Lee uses a carbon dioxide or yttrium-aluminum-garnet laser (see Lee column 4, lines 5-6), the examiner's position is that performing the Lee process within the temperature and time ranges presently claimed would have been well within the level of one of ordinary skill in the art. With regard to clams 13 and 14, Lee column 4, lines

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49-62 appear to disclose a process in accord with these claims. While Lee does not specify the dielectric constant of the insulating layer in the prior art, this would appear to be a material property of a given substance. Because the actual substances used in the prior art and the claimed invention may be the same, the process as claimed would fall within the purview of what is described by Lee et al.

Consequently, a prima facie case of obviousness is established between the disclosure of Lee et al. and the process as presently claimed.

- 5. Claims 2-7 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310 for all correspondence except for After Final amendments in which case the Fax number is (703) 872-9311. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GEORGE WYSZOMIERSKI PRIMARY EXAMINER

GPW May 2, 2003